

# **A Comparison of False Positive Rates for Regadenoson and Treadmill Exercise in Myocardial Perfusion Imaging**

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## **Abstract**

The purpose of this research was to find if the pharmacologic stress agent, regadenoson, yields more false positive results than treadmill exercise when doing a myocardial perfusion stress testing. **Methods:** The subjects for this research were chosen retrospectively and included 34 patients that were stressed with treadmill exercise and the 34 patients that were stressed using regadenoson. All subjects had a positive myocardial perfusion study with either treadmill stress or regadenoson stress and had a subsequent cardiac catheterization procedure within six months of the positive MPI test. The false positive rate was measured for each stress method, using the catheterization results as the reference standard. **Results:** The false positive rate for patients who underwent treadmill exercise was 24% (8/34). The false positive rate for patients who underwent pharmacologic stress with regadenoson was 35% (12/34). **Conclusion:** Treadmill exercise for MPI should be utilized whenever possible to prohibit unnecessary cardiac catheterization procedures.